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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,381	06/29/2001	Zhiyong Zhao	TT4315	9540

7590 04/18/2003
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EXAMINER

TRAN, HUAN HUU

ART UNIT PAPER NUMBER

2861

DATE MAILED: 04/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/896,381

Applicant(s)

ZHAO ET AL.

Examiner

Huan H. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 5-18, 20-22 and 24 is/are rejected.
- 7) ☒ Claim(s) 2-4, 19 and 23 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Objections

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 and dependent claims thereof, "said structure" lacks antecedent basis.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 5, 18, 22, 24 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Aoki (JP 8-167595).

Aoki discloses a depolarization method comprising the step of selectively exposing a portion of a fabrication tool (pad 4 with an insulating part 41) to a plasma for a selected time interval to reduce a polarization of said portion of said fabrication tool.

The limitation "whereby interference with a motion of a device being processed by said fabrication tool is not observed" is noted but it not given any patentable weigh. It is well settled that "a prior art reference may anticipate when the claim limitations not expressly found in that reference

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are nonetheless inherent in it." . See *In re Cruciferous Sprout Litigation* (64 USPQ2d 1202 (CA FC 2002) (Processes for Growing and Eating Certain Sprouts to Reduce Level of Carcinogens Anticipated by Disclosure of Growing and Eating Those Sprouts -- On Aug. 21 in an opinion by Judge Prost, the Federal Circuit upheld a decision that patents owned by Johns Hopkins University and licensed to Brassica Protection Products, Inc. are invalid for anticipation by the prior art. The patents are for methods of growing and eating certain sprouts to reduce the level of carcinogens in animals, thereby reducing the risk of developing cancer. Prior art references disclose growing and eating those specific sprouts. The Federal Circuit cited authority for the rule that, "a prior art reference may anticipate when the claim limitations not expressly found in that reference are nonetheless inherent in it." The court said, "While Brassica may have recognized something quite interesting about those sprouts, it simply has not invented anything new.")

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki.

Aoki discloses the claimed invention except for the difference that it does not clearly disclose a specific time interval for exposing the fabrication tool to a plasma. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select a particular exposure time interval to ensure proper depolarization of the fabrication tool, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

5. Claims 6-12, 14-17, 20, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki in view of Farley et al (US Patent No. 6271529).

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Aoki discloses the invention except that it is not clear from the available English abstract that a plasma flood gun is used as the plasma source for generating a plasma formed from a noble gas.

Farley et al. discloses the use of a plasma flood gun 100 having aperture 150 positioned in proximity to the fabrication tool (wafer 24) for generating plasma formed from a noble gas such as xenon or argon to neutralize the ion beam and the work surface.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a plasma flood gun in the plasma treatment device of Aoki to introduce a neutralizing charge to the workpiece.

Allowable Subject Matter

6. Claims 2-4, 19, 23 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

7. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 2 and claim 19, prior art of record do not teach or suggest the step of selecting for exposing said portion of said fabrication tool at preselected intervals of time, and exposing said structure (said fabrication tool) if interference with said motion of said device is observed.

Regarding claim 3, prior art of record do not teach or suggest a step of detecting interference with the motion of the device being processed by the fabrication tool.

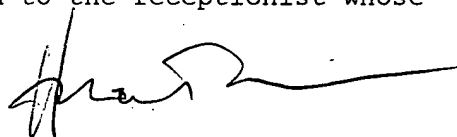
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Regarding claim 4 and claim 23, prior art of record do not teach or suggest a step of detecting interference with the motion comprises step of detecting a misalignment of the device with respect to the portion of the fabrication tool.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huan H. Tran whose telephone number is (703) 308-0749. The examiner can normally be reached on M-F with alternate Friday off, from 7:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin Fuller can be reached on (703) 308-0079. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703)872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1749.



Huan H. Tran
Primary Examiner
Art Unit 2861

hht
April 16, 2003